UNITED STATES PATENT AND TRADEMARK OFFICE

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10/532,106	04/21/2005	Robert A Shipman	36-1894	9054

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 April 2005</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24, 27 and 28</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-24, 27 and 28</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>21 April 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>07/07/05</u>.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the communication filed on April 21, 2005. Claims

25-26 have been cancelled. Claims 4-6, 9-10, 12, 16-18, 21-22, 24 and 27 have been

amended. Claims 1-24 and 27-28 are pending. .

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

3.   Claim 27 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

4.   Claim 27 is directed merely software (refer to paragraphs [0057] and [0082] in

Applicant's specification). The claim lacks the necessary physical articles or objects to

constitute a machine or a manufacture within the meaning of 35 USC 101. They are

clearly not a series of steps or acts to be a process nor are they a combination of

chemical compounds to be a composition of matter. As such, they fail to fall within a

statutory category. They are, at best, functional descriptive material *per se*. Descriptive

material can be characterized as either "functional descriptive material" or "nonfunc-

tional descriptive material." Both types of "descriptive material" are nonstatutory when

claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When

functional descriptive material is recorded on some computer-readable medium, it

becomes structurally and functionally interrelated to the medium and will be statutory in

most cases since use of technology permits the function of the descriptive material to be

realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed.

Cir. 1994). Merely claiming non-functional descriptive material, i.e., abstract ideas,

stored on a computer-readable medium, in a computer, or on an electromagnetic carrier

signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8

(noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas

because "[t]he sole practical application of the algorithm was in connection with the

programming of a general purpose computer.").

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-7, 9-19, 21-24 and 27-28 are rejected under 35 U.S.C. 102(b) as being

anticipated by Kraay et al (U.S. Patent 5,956,717 hereinafter, "Kraay").

7.   With respect to claim 1,

Kraay discloses **a method for processing user records** (Kraay col. 1 line 24

e.g. subscriber records), **comprising the steps of:**

a) receiving (Kraay col. 4 lines 19-23 e.g. obtainable) **user record information**

(Kraay col. 3 lines 26-46 e.g. A third database includes biographical data about the

telephone subscribers) **from a plurality of users** (Kraay col. 3 lines 26-46 e.g.

telephone subscribers)**, each set of user record information including at least a**

user identifier (Kraay col. 3 lines 26-46 e.g. telephone subscribers, such as name,

address; the name of one of the telephone subscribers, and the name has been

interpreted for the skilled person as an alternate of a user identifier) **and/or a user**

address (Kraay col. 3 lines 26-46 e.g. telephone subscribers, such as name, address;

the address of one of the telephone subscribers)**, and at least a subset** (Kraay col. 3

lines 26-46 e.g. telephone subscribers, such as name, address; some of the telephone

subscribers) **of the received sets of user record information each further including**

a list of one or more other user identifiers and user addresses (Kraay col. 3 lines

26-46 e.g. telephone subscribers, such as name, address; names and addresses of

other telephones subscribers)**.**

b) **storing** (Kraay col. 3 lines 26-46 e.g. A third database includes biographical

data about the telephone subscribers) **the received sets of user record information**

as a plurality of user records (Kraay col. 1 line 24 e.g. subscriber records)**;**

c) **processing the user records to determine any common** (Kraay col. 3 lines

26-46 and col. 5 lines 1-4 e.g. matches between the first and second databases are

made. Related components are grouped into clusters; An output file is constructed,

called SUSPECT.VEC for example, and comprises the telephone numbers common to

both databases 12 and 14) **user identifiers and/or user addresses** (Kraay col. 3 lines

26-46 and col. 5 lines 1-4 e.g. telephone numbers) **stored therein; and**

      d) storing (Kraay col. 3 lines 26-46 e.g. grouped into clusters) **link information**

linking (Kraay col. 1 lines 33-34, col. 3 lines 26-46 and col. 5 lines 1-4 e.g. linking

subjects, vehicles, locations, businesses and other entities; matches between the first

and second databases are made. Related components are grouped into clusters; An

output file is constructed, called SUSPECT.VEC for example, and comprises the

telephone numbers common to both databases 12 and 14; the common telephone

number is an alternate of an link information linking those subscriber records) **those**

user records (Kraay col. 1 line 24 e.g. subscriber records) **for which common user**

identifiers and/or user addresses were found to be stored therein.

8.   With respect to claim 2,

      Kraay further discloses **wherein at least one or more of the user addresses**

are telephone numbers (Kraay col. 3 lines 26-46 and col. 5 lines 1-4 e.g. telephone

numbers).

9.   With respect to claim 3,

      Kraay further discloses **wherein at least some of the telephone numbers**

(Kraay col. 6 lines 54-55 e.g. cellular telephone cell-switching and call-routing

information) **are mobile telephone numbers.**

10.   With respect to claim 4,

      Kraay further discloses **wherein at least one or more of the user identifiers**

are the names of registered users (Kraay col. 3 lines 26-46 e.g. telephone

subscribers, such as name, address; some of the telephone subscribers).

11.   With respect to claim 5,

Kraay further discloses **wherein the processing step further comprises:**

processing the user records to determine, for any particular (Kraay col. 5

lines 17-49 e.g. a particular connection address) **user record, whether the user**

address (Kraay col. 5 lines 17-49 e.g. each connection address in a cluster) **and/or**

user identifier thereof is/are included in any of the lists of user identifiers and/or

user addresses from the other user (Kraay col. 3 lines 41-45 and col. 5 lines 17-49

e.g. The unique telephone numbers in the database are identified. Matches between

the first and second databases are made; each connection address in a cluster has

made at least one connection with a second connection address) **records;**

    and wherein the storing step further comprises:

    storing link information linking the particular user record to those other of

the user records whose lists included the particular user record's user address

and/or user identifier.

12.   With respect to claim 6,

    Kraay further **discloses wherein the processing step further comprises:**

    processing the user records to determine, for any particular user identifier

and/or user address (Kraay col. 5 lines 17-49 e.g. a particular connection address)

stored in the list of any particular user record, whether the user address and/or

user identifier is/are the same (Kraay col. 3 lines 41-45 and col. 5 lines 17-49 e.g. The

unique telephone numbers in the database are identified. Matches between the first

and second databases are made; each connection address in a cluster has made at

least one connection with a second connection address) **as any of the other user**

record user identifiers and/or user addresses;

and wherein the storing step further comprises:

storing link information linking the particular user record to those other of

the user records whose user identifiers and/or user addresses is/are the same as

the particular user identifier and/or user address stored in the list of the particular

user record.

13.   With respect to claim 7, ·

Kraay further discloses **a method for searching user records** (Kraay col. 2

lines 34-40 e.g. key-word searched for one or more subjects; Universal pattern and

association searches are conventionally used to combine telephone, surveillance,

financial and mail activity, and then to look for any systematic patterns and links.

Relational links between a subject, a group, a business, etc., are displayed) **for user**

addresses (Kraay col. 2 lines 34-40 and col. 3 lines 26-46 e.g. telephone; telephone

numbers) **in response to a request therefor, comprising the steps:**

a) storing a plurality of user records, each record to be processed

including at least a user identifier and/or a user address, and at least a subset of

the user records each further including a list of one or more other user identifiers

and user addresses;

b) storing link information linking those user records for which common

user identifiers and/or user addresses are stored therein;

c) receiving a search request (Kraay col. 2 lines 34-40 e.g. key-word searched

for one or more subjects; Universal pattern and association searches are conventionally

used to combine telephone, surveillance, financial and mail activity, and then to look for

any systematic patterns and links. Relational links between a subject, a group, a

business, etc., are displayed) **from a user specifying a user identifier for which the**

corresponding user address is required; and

d) searching the stored user records using the link information (Kraay col. 1

lines 33-34, col. 2 lines 34-40, col. 3 lines 26-46 and col. 5 lines 1-4 e.g. linking

subjects, vehicles, locations, businesses and other entities; look for any systematic

patterns and links. Relational links between a subject, a group, a business, etc., are

displayed; matches between the first and second databases are made. Related

components are grouped into clusters; An output file is constructed, called

SUSPECT.VEC for example, and comprises the telephone numbers common to both

databases 12 and 14; the common telephone number is an alternate of an link

information linking those subscriber records) **to provide one or more user addresses**

from the user records corresponding, to the user identifier specified in the search

request.

14.   With respect to claim 9,

       Kraay further discloses

       e) searching the user records to produce a list of search (Kraay col. 5 lines

35-50 e.g. A first such file is named NUMVAL.DAT for example, and comprises each

telephone number and its valence, sorted in numerical order by telephone number)

results corresponding to the search request; and

   f) using the link information to order the list of search results in order of

potential relevance (Kraay col. 5 lines 35-50 e.g. computing a "distance" between any

two network addresses that have evidently communicated with each other; each

telephone number and its valence).

15.   Concerning claims 10-12,

   The limitations therein have substantially the same scope as claims 2-4.

Therefore claims 10-12 are rejected for at least the same reasons as claims 2-4.

16.   Concerning claim 13-19 and 21-24,

   The limitations therein have substantially the same scope as claims 1-7 and 9-12

because claims 13-19 and 21-24 are system claims for implementing those steps of

claims 1-7 and 9-12. Therefore claims 13-19 and 21-24 are rejected for at least the

same reasons as claims 1-7 and 9-12.

17.   Concerning claim 27,

   The limitations therein have substantially the same scope as claim 1 because

claim 27 is a computer program claim for implementing those methods of claim 1.

Therefore claim 27 is rejected for at least the same reasons as claim 1.

18.   Concerning claim 28,

   The limitations therein have substantially the same scope as claim 27 because

claim 28 is a computer readable storage medium claim for implementing those steps of

claim 27. Therefore claim 28 is rejected for at least the same reasons as claim 27.

Claim Rejections - 35 USC § 103

19.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

20.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

21.   Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being obvious by Kraay

as applied to claims 1-7, 9-19, 21-24 and 27-28 above, in view of De l'Etraz et al (U.S.

Patent 6,324,541 hereinafter, "De l'Etraz").

22.   With respect to claim 8,

Kraay further discloses **using the link information to identify further user**

records linked to the identified user record; wherein the link information is

iteratively (Kraay col. 5 lines 17-25 e.g. Thus each connection address in a cluster has

made at least one connection with a second connection address, and that second

connection address has made at least one connection with a third connection address,

and so on) **used to identify further user records located up to a predetermined**

number (Kraay col. 5 lines 40-50 e.g. the maximum number of communications

between any two telephone numbers in a given cluster) **of links from the user record**

of the user making the search request; the searching step further comprising:

comparing the user identifiers (Kraay col. 4 lines 65-57 e.g. compares

telephone numbers in the database 14 (SUSPECT.DAT) with those in database 12

(CHRONO.DAT)) **of each respective identified user record with the user identifier**

specified in the search request; and

returning the user addresses of those user records whose user identifiers

matched (Kraay col. 3 lines 40-45 e.g. matches between the first and second database

are made) **the search request as the search results.**

Although Kraay substantially teaches the claimed invention, Kraay does not

explicitly indicate the capability of **identifying the user record of the user making the**

search request (De l'Etraz col. 21 lines 16-22, col. 23 lines 59-61 and col. 24 lines 45-

47 e.g. allow certain (i.e. managerial) users of the system to browse in the "Company

Contacts" mode. That is, security measures are implemented to safe-guard the private

database 104, so that only certain users may view other user's personal contact

information; as indicated in TABLE 3, a user may perform a search of the databases

102 and/or 104 in order to determine the contact pathway, if any exists, from the user to

a targeted person at a specific organization; determination of an optimal contact

pathway for an entity (i.e., user), according to an embodiment of the present invention).

De l'Etraz teaches the limitations as stating above.

It would have been obvious to one of ordinary skill in the art of user record

searching, at the time of the present invention, having the teachings of Kraay and De

l'Etraz before him/her, to modify the user record searching method of Kraay, wherein

the user record searching method would include identifying the user record of the user

making search request as taught by De l'Etraz because that would have allowed the

user record searching method to intelligently establish and present the contacts of

contacts and further display (and print) the optimal relationship path to reach desired

contacts (i.e., persons or organizations) (De l'Etraz col. 3 lines 21-23).

23.   Concerning claim 20,

The limitations therein have substantially the same scope as claim 8 because

claim 20 is a system claim for implementing those methods of claim 8. Therefore claim

20 is rejected for at least the same reasons as claim 8.

Conclusion

The prior art made of record, listed on form PTO-892, and not relied upon, if any,

is considered pertinent to applicant's disclosure.

24.   The examiner requests, in response to this office action, support be shown for

language added to any original claims on amendment and any new claims. That is,

indicate support for newly added claim language by specifically pointing to page(s) and

line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

25.   When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the reference cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SyLing Yen whose telephone number is 571-270-1306. The examiner can normally be reached on Mon-Fri 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SyLing Yen

Examiner
Art Unit 2166

SY
June 28, 2007

/CDL/

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER